

MATH 311: Linear algebra

Course Outline (2016-01)

Instructor

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office hours Mon 11 am - 12:30 pm; Tue 10:30 am - 12 noon; or by drop-in or appointment

Course Topics

prerequisites MATH 110 or 211 (matrix algebra) and MATH 212 (intro abstract algebra)

topics vector spaces, subspaces, linear transformations, spectral theorem, canonical forms

This is a proof-intensive rigorous course. Students will be required to learn the proofs in the textbook and construct their own proofs to solve exercises.

Resources

textbook S. Friedberg, A. Insel and L. Spence, “Linear algebra”, 4th edition.

The textbook is self-contained. Most sections include some of the matrix theory done in 110 or 211 as well as deeper abstract and theoretical material. The emphasis of this course is on these abstract and theoretical aspects. The appendices include some of the relevant material from 212.

course webpage <http://www.math.uvic.ca/courses/2016s/math311/a01/index.html>

Evaluation and Grading

Approximately 5 homework assignments will be given, roughly equally spaced.

Two term tests will be held in class; the dates are February 17 and March 23.

There will be a three hour final examination scheduled during the April exam period.

Your final percentage grade will be computed according to the following weights:

Homeworks	30%
Term tests	20%
Final exam	50%

Percentage scores will be converted to letter grades according to the university-wide standard table: <http://web.uvic.ca/calendar2015-09/FACS/UnIn/UARe/Grad.html>.

Course policies

You will probably not need a calculator in this course. However, for the record, there is a department-wide standard calculator, available from the bookstore.

Late homework requires a note from a doctor or academic official. In the event of a delay of more than two days, homework can be submitted for feedback, but having credit substituted with the overall class grade on other work. Contact me for arrangements if you have an excused absence from one of the term tests.

Discussing exercises (including assigned homework problems) with classmates is a useful and mathematically healthy practice. However, when it comes time to finalize your solutions for submission, you must work independently and write solutions in your own words. You may NOT copy homework solutions.

Other important remarks and policies on topics such as attendance, academic integrity, and excused deferrals can be found here: <http://www.uvic.ca/science/math-statistics/undergraduate/course-policies/>.

Course experience survey

Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience. When it is time for you to complete the survey, you will receive an email inviting you to do so. Please be thinking about this important activity during the course.